



# D0 Status Report 9/12/2005

Taka Yasuda Fermilab





### Data Taking for 8/29 - 9/4

Day	Delivered	Recorded	Eff.	Comments
8/29 (Mon)	3.57 pb <sup>-1</sup>	3.10 pb <sup>-1</sup>	87 %	<ul><li>30 min downtime due to SMT SDAQ problem.</li><li>40 min downtime due to CFT x52.</li><li>20 min downtime due to SMT x65.</li></ul>
8/30 (Tue)	3.53 pb <sup>-1</sup>	2.95 pb <sup>-1</sup>	84 %	30 min downtime due to SMT download problem at begin store. 15 min downtime due to CFT x52 FEBs.
8/31 (Wed)	1.51 pb <sup>-1</sup>	1.18 pb <sup>-1</sup>	78 %	2 hour downtime due to Muon crate x32. Controlled access.
9/1 (Thu)	2.57 pb <sup>-1</sup>	2.30 pb <sup>-1</sup>	89 %	Muon HV trips.
9/2 (Fri)	0.69 pb <sup>-1</sup>	0.64 pb <sup>-1</sup>	93 %	
9/3 (Sat)	1.99 pb <sup>-1</sup>	1.77 pb <sup>-1</sup>	89 %	35 min downtime due to Muon HV trips.
9/4 (Sun)	2.51 pb <sup>-1</sup>	2.19 pb <sup>-1</sup>	88 %	30 min downtime due to Muon HV trips.

8/29 - 9/4	16.37 pb <sup>-1</sup>	14.13 pb <sup>-1</sup>	86 %	





#### Data Taking for 9/5 - 9/11

Day	Delivered	Recorded	Eff.	Comments
9/5 (Mon)	3.25 pb <sup>-1</sup>	2.92 pb <sup>-1</sup>	90 %	
9/6 (Tue)	2.62 pb <sup>-1</sup>	2.21 pb <sup>-1</sup>	85 %	30 min downtime due to STT x70 FEBs 28 cm β* lattice 4 hours into store.
9/7 (Wed)	1.20 pb <sup>-1</sup>	1.02 pb <sup>-1</sup>	85 %	35 min downtime due to Muon PDT HV trips 35 min downtime due to a hot calorimeter tower
9/8 (Thu)	1.59 pb <sup>-1</sup>	1.33 pb <sup>-1</sup>	84 %	25 min downtime due to Muon PDT x35. 28 cm $\beta^*$ 6 hours into store.
9/9 (Fri)	2.26 pb <sup>-1</sup>	2.08 pb <sup>-1</sup>	92 %	20 min downtime due to SMT x62 readout problem.
9/10 (Sat)	0.52 pb <sup>-1</sup>	0.47 pb <sup>-1</sup>	90 %	30 min downtime due to SMT x60 readout problem. Controlled access to replace BLS cards
9/11 (Sun)	2.21 pb <sup>-1</sup>	2.07 pb <sup>-1</sup>	94 %	

- 9/11	89 %
13.65 p	





# Summary of downtime in the past two weeks

- SMT (Silicon Microstrip Tracker)
  - (30+20+30+20+30)=130 min downtime due to SMT
    - SDAQ, crate x65 readout, download, crate x62 readout, and crate x60 readout problems
- STT (Silicon Track Trigger)
  - 30 min downtime due to STT
    - Interference from a test stand
- CFT (Central Fiber Tracker)
  - (40+15)=55 min downtime due to CFT
    - Crate x52 readout problems.
- CTT (Central Track Trigger)
  - No downtime due to CTT





# Summary of downtime in the past two weeks

- Calorimeter
  - 35 min downtime due to Cal
    - A hot hadronic tower
- Central Muon
  - (120+20+35+30+15+35+25)=280 min downtime due to Central Muon
    - Failed PS, HV trips, and readout problems
- Forward Muon
  - No downtime due to Forward Muon





## Summary of Accesses to Collision Hall and Tunnel

- 8/31 (Wed)
  - Solenoid lead flow #1 warm up to re-seal He gasket.
  - Muon Run IIb Control Board test.
  - L1Cal rack water leak fixed.
- 9/3 (Sat)
  - FPD tunnel access to fix a broken LV power supply.
- 9/7 (Wed)
  - Power cycled muon MDT LV power supplies.
  - Adjusted motor speed for FPD D1I and D2I pots.
  - Swapped a BLS power supply.
- 9/10 (Sat)
  - Replaced 6 bad BLS cards.





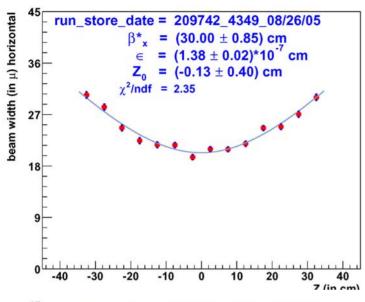
#### **Notable Events**

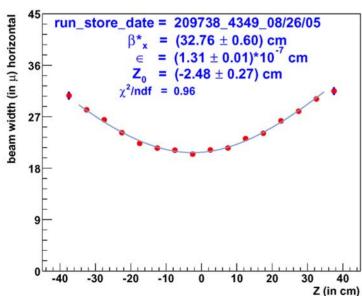
- 28 cm  $\beta$ \* implemented during store (9/6 and 9/8)
  - Luminosity increased by several %.
- Recorded luminosity surpassed 900 pb<sup>-1</sup> on 8/29
- August was a record month
  - Run II best delivered lumi: 74.4 pb<sup>-1</sup>
    - Previous record was 67.7 pb<sup>-1</sup> in April, 05
  - Run II best recorded lumi: 63.9 pb<sup>-1</sup>
    - Previous record was 59.4 pb<sup>-1</sup> in April, 05
- 30<sup>th</sup> Run II paper submitted on 8/30

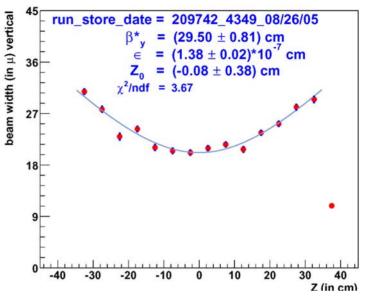


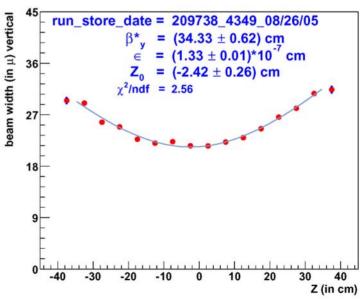
#### β\* measurement















### L1 Cal Rack Water Leak Repair

